## **Public consultation**

## on the Smart Cities and Communities Initiative

## Online questionnaire

# **Outline of the Initiative**

## Introduction

About three quarters of the population in the EU live in or around cities and the trend towards urbanization continues at European and global scale. Such urban areas in the EU consume 70% - 80% of the energy in the EU and emit about the same share of greenhouse gases.

Cities and urban areas are therefore crucial in the transformation towards a low carbon society. They will have to adapt and modernise their infrastructure to reduce their carbon emissions and other pollutants while continuing to ensure the well-being of their citizens. In particular, cities will have to reduce the energy consumption in buildings, adapt the energy networks to integrate more renewable energy production and promote more sustainable transport systems for people and goods towards and within cities. Accelerated and smarter use of information and communication technologies (ICT) in smart energy and transport systems will be key enablers in this process.

Moreover, new organisational and economic models will have to be developed to adapt low carbon supply technologies to urban areas or realise synergies between different sectors, for example between the housing sector, the transport sector and industrial and tertiary activities.

The initiatives and actions should be conceived at local level, but guidance and support at European level can accelerate this shift.

While respecting the principle of subsidiarity, EU action can stimulate and support viable examples of innovative solutions for local communities, mobilising and guiding the efforts of different stakeholders towards a more efficient and more sustainable supply and use of energy and accelerate the market uptake of low carbon technologies.

Increasing energy efficiency is the most cost effective option in transforming today's cities into low carbon cities. Energy efficiency measures, however, require a holistic approach to identify and tap the potential for cost efficient energy savings measures at a large scale.

#### A comprehensive approach at local level

As demonstrated by the Covenant of Mayors,<sup>1</sup> a clear overall commitment by the Covenant signatories to reduce the  $CO_2$  emission by 2020 by at least 20%, through development and implementation of their Sustainable Energy Action Plans (SEAPs), has brought together diverse stakeholders at local level in more than 2 200 cities. The territorial approach of the Covenant has led to long-term integrated planning and the development of practical solutions which, together with sharing of experience at the EU level, ensures the overall coherence of the initiative.

The Smart Cities and Communities Initiative therefore intends to build on the efforts that European cities are making or have already made to draw up comprehensive, long-term urban sustainability plans such as SEAPs. Innovative projects applying for EU funding should be embedded in such plans.

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The Smart Cities and Communities initiative also intends to build on the success of the CONCERTO and CIVITAS programmes promoting efficiency and sustainability at local level in the energy and transport sectors.

Through the combination with other existing initiatives such the Covenant of Mayors, the Green Digital Charter Europe and the CIVITAS Initiative and forum network for promoting sustainable urban transport, the Smart Cities and Communities initiative will in particular spread knowledge of successful technological, economic and organisational solutions.

#### A catalogue of measures for a demand driven EU initiative

The low carbon technologies and solutions will be rendered commercially interesting by measures which increase the availability of products and services and realise economies of scale in their production and deployment.

The measures can belong to different categories of tools such as technological innovation to test full-scale technology applications, market uptake solutions to speed up the deployment of low carbon innovations as well as exchange of knowledge and best practices.

Cities can learn from each other in particular to the extent that they are faced with similar problems even if their level of economic or technological development varies.

To enhance the replication potential across the EU and facilitate the exchange of knowledge, the initiative envisages to require cities to develop common demonstration projects in the different thematic areas of the initiative. In line with the rules of the 7<sup>th</sup> framework research programme, which will be the initial source of funding, cities from at least three Member States are expected to team up to propose such common projects to apply for funding.

Similar conditions in terms of geography, climate, economic morphology or governance may induce cities to team up to develop common projects, enhance the replication potential and create framework conditions for mass market application of the measures and solutions supported by the Smart Cities and Communities initiative.

While the precise scope and benefit of the measures depend on the particular circumstances of the individual cities, it is widely assumed that there is a great energy savings potential for cities in the following areas: energy, transport, ICT, water and waste management. In the case of the energy sector, measures concerning buildings, networks, energy supply technologies and the integrative management of energy flows should be envisaged.

Furthermore, the market uptake of innovative low carbon solutions in the urban environment may be stimulated by measures such as public procurement, standard setting or sector specific regulation concerning for example the energy performance of buildings, organisational innovation such as innovative business models or new innovative financial schemes. With respect to financing, the Smart Cities and Communities seeks to ensure a close link with the European Local Energy Assistance (ELENA) facility providing financial and technical assistance to help local and regional authorities attract funding for sustainable energy projects and with the European Energy Efficiency Facility (EEE–F) of the European Energy Programme for Recovery (EEPR) currently under preparation.

#### In search of innovative energy efficiency

Smart cities are expected to identify innovative energy efficient urban energy, transport, water and waste solutions. These solutions can serve as examples of excellence for other European cities and are meant to trigger widespread replication. Smart cities should be at the cutting edge of the innovative process and be prepared to take on technological and economic risks beyond the normal.

## Launch of the Smart Cities and Communities Initiative during 2011

In its Communication on "*Investing in the Development of Low Carbon Technologies*",<sup>2</sup> the Commission proposed that a Smart Cities and Communities Initiative would become the most appropriate means to make the production and use of energy in cities more sustainable and efficient.

In its Communication<sup>3</sup> "Energy 2020 - A strategy for competitive, sustainable and secure energy", the Commission identified the Smart Cities Initiative as a project of European dimension for energy efficiency and for accelerating the large scale deployment of innovative low carbon technologies. On 4 February 2011, the European Council invited the Commission to launch an Industrial Initiative *inter alia* on *'energy saving solutions in cities*'.

In line with this guidance, the Smart Cities and Communities Initiative will initially rely on the organisational framework of the Strategic Energy Technology (SET)-Plan. In a next step, the Commission plans to create a stakeholder forum gathering the various stakeholders in this area and structuring their dialogue and their contribution to the initiative. At a later stage, the initiative may evolve into a European Innovation Partnership as envisaged by the Commission's Communication on the Innovation Union of 6 October 2010.<sup>4</sup>

As part of the preparation of this initiative, the present consultation seeks the opinion from all relevant stakeholders. Its purpose is to propose a European vision for a Smart Cities and Communities initiative and to receive feedback and additional ideas on this proposal. A public consultation by means of this online questionnaire offers the opportunity to all interested stakeholders to express their views in the preparation stage of the initiative.

This **questionnaire** is divided into two thematic areas including several questions. Each of them is introduced by a short text outlining the context of the questions.

After the end of the consultation, the Commission will publish the findings of the consultation in a **report**. It will explain how the results of this consultation will be taken into account to prepare the Smart Cities and Communities Initiative.

It should be noted that another, related public consultation is ongoing i.e. the consultation on the "Common Strategic Framework for research and innovation funding at EU level". It proposes a new approach to design programmes to achieve better value for money, stronger impact and easier participation rules. Such programmes may be used in the future to support Smart Cities and Communities. The consultation was launched on 9 February and will remain open until 20 May 2011. The online questionnaire is available at: <a href="http://ec.europa.eu/research/csfri/index\_en.cfm">http://ec.europa.eu/research/csfri/index\_en.cfm</a>.

Thank you very much for participating in this public consultation.

<sup>&</sup>lt;sup>2</sup> COM(2009)519 final of 7 October 2009

<sup>&</sup>lt;sup>3</sup> <u>http://ec.europa.eu/energy/strategies/2010/2020 en.htm</u>

 $<sup>^{4}</sup>$  COM(2010)546 final of 6 October 2010.